Construction Advisory

CA 2008-12 (Supersedes CA 2007-06-Rev) August 1, 2008

From Brenda O'Brien, Engineer of Construction and Technology

MDOT-Construction and Technology Division P.O. Box 30049 Lansing, Michigan 48909 Phone/517-322-1087 Fax/517-322-5664 www.michigan.gov/mdot/

Index: Pavement, Concrete

Questions regarding this Construction Advisory should be directed to:

John Staton, Materials Engineer, at 517-322-5701 or statonj@michigan.gov

Portland Cement Concrete (PCC) Pavement Joint Sealing

Following is a summary of Section 602.03 Construction, R. Cleaning Joints and Section 602.03 Construction, S. Sealing Joints of the *2003 Standard Specifications for Construction:*

- 1. Saw reservoir for joint.
- 2. Flush slurry from the joint with water immediately after sawing.
- 3. Blast clean all joint faces with an oil-free dry abrasive, or water having a pressure of 1500- to 3000 psi.
- 4. Allow the joint to air dry (dry to the touch with no visible signs of surface moisture).
- 5. Blast clean all joint faces with a jet of compressed air, free of water and oil, having a minimum pressure of 90 psi.
- 6. Seal the joint. The temperature of the concrete shall be a minimum of 40° F and dry to the touch with no visible signs of surface moisture in order to place the sealant.

The current Standard Specifications for Construction do not discuss the use of artificially heated air for drying or warming the joint reservoir prior to sealing. However, it is recognized that this contractor initiated practice is not in the best interest of long term pavement performance, and could ultimately be detrimental to the integrity of the concrete adjacent to the joints. Therefore, the department is prohibiting this practice for all MDOT and federally funded projects.

A special provision will be included in projects anticipated for the October 2008 letting prohibiting the use of artificially heated air for sealing joints in new concrete pavements. In the interim, the engineer should notify their respective contractors, and take the appropriate actions necessary to ensure this practice is discontinued for projects currently under contract.



BJO:JFS